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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|--|-------------|----------------------|----------------------|-----------------|--|
| 10/538,863 | 12/19/2005 | Iain Cooper | 57.0530 US PCT | 5729 | |
| 37603 - 7550 - 661222008 SCHLUMBERGER-DOLL RESEARCH ATTN: INTELLECTUAL PROPERTY LAW DEPARTMENT | | | EXAM | EXAMINER | |
| | | | STEPHENSON, DANIEL P | | |
| P.O. BOX 425045 CAMBRIDGE, MA 02142 | | ART UNIT | PAPER NUMBER | | |
| | | | 3676 | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/538.863 COOPER ET AL. Office Action Summary Examiner Art Unit DANIEL P. STEPHENSON 3676 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 27 February 2008. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3.5-7.9.11-15.20.21 and 24-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 20.21 and 24-26 is/are allowed. Claim(s) 1-3,5-7,9,11 and 13 is/are rejected. 7) Claim(s) 12.14 and 15 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 June 2005 and 07 September 2007 is/are: a) accepted or b) □ objected to by the Examiner Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

2) 1 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ______.

Paper No(e)/Mail Date ___

6) Other:

5) Notice of Informal Patent Application

Application/Control Number: 10/538,863 Page 2

Art Unit: 3672

DETAILED ACTION

Claim Rejections - 35 USC § 102

 The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-3, 5-7, 9, 11, 13 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kammerer (US 3,097,707). Kammerer discloses a subpart of a drill string. It is connected to the string at the top (65) and has a connection for the drill at the lower end. The lower end connection (16) could also be connected to a drill collar. It has a central main section with two or more extendable elements (14) that are adapted to extend under drilling conditions and contact the inner wall of the borehole. They exert a compacting pressure on cuttings present in the annulus and the drill wall. The main section has a bore (29) that can serve as a drill fluid delivery channel or a flow path for return fluid, depending on whether reverse circulation drilling is being performed. The main bore lead to the drill head while to periphery channels lead to the annulus of the borehole. The subpart is rotated by motion of the drill string. The extendable elements are made from abrasive material. The angle of attack for the extendable elements is less then 45 degrees. The extendable elements are adapted to engage the borehole wall when drilling fluid is pumped through the drill string and each of the extendable elements has a hinge section (13). The extendable elements are broadly read as compliant because they are able to be moved inwardly against the fluid force exerted.

Application/Control Number: 10/538,863 Page 3

Art Unit: 3672

Allowable Subject Matter

 Claims 12, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 20, 21 and 24-26 are allowed.

Response to Arguments

 Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P. STEPHENSON whose telephone number is (571)272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on (571) 272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/538,863 Page 4

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Bagnell/ Supervisory Patent Examiner, Art Unit 3672

DPS